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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/656,127	09/08/2003	Jang-Keun Oh	116511-00111	8650	
27557 BLANK ROME	7590 03/19/200 E LLP	EXAMINER			
600 NEW HAMPSHIRE AVENUE, N.W.			REDDING, DAVID A		
WASHINGTON, DC 20037			ART UNIT	PAPER NUMBER	
			1744		
CHOPENIED STATISTICS					
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
3 MONTHS		03/19/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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-		Application No.	Applicant(s)			
		10/656,127	OH, JANG-KEUN			
	Office Action Summary	Examiner	Art Unit			
		David A. Redding	1744			
Period fo	The MAILING DATE of this communication apports or Reply	pears on the cover sheet with the	correspondence address			
WHIC - Exte after - If NO - Failu Any	CHEVER IS LONGER, FROM THE MAILING DATE OF THE MAILING OF THE MAILING DATE OF THE MAILING OF THE MAIL	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE.	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 26 De	<u>ecember 2006</u> .				
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This action is non-final.					
`3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposit	tion of Claims					
4)⊠	Claim(s) <u>1-15,19,20,25-36 and 39-41</u> is/are pe	ending in the application.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)🖂	Claim(s) 1-15 and 26-35 is/are allowed.					
• -	Claim(s) <u>19,20,25 and 39-41</u> is/are rejected.					
	Claim(s) is/are objected to.					
8)[_]	Claim(s) are subject to restriction and/o	r election requirement.				
Applicat	tion Papers					
9)□	The specification is objected to by the Examine	er.				
10)	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct					
11)∐	The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	e Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
12)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (f).			
a)) All b) Some * c) None of:					
	1. Certified copies of the priority documents					
	2. Certified copies of the priority document	• •				
	3. Copies of the certified copies of the prior	•	ed in this National Stage			
* 1	application from the International Bureau	• • • • • • • • • • • • • • • • • • • •	ad			
" (See the attached detailed Office action for a list	or the certified copies not receive	ea.			
	•	•				
Attachmer	* *					
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summan Paper No(s)/Mail D				
3) 🛛 Infor	rmation Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal				
Pape	er No(s)/Mail Date <u>12/26/06</u> .	6)				

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 19,20,25,39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,757,933 (Oh et al.) in view of USP 5,779,745 (Kilstrom) and USP 6,436,160 ('160).

Oh et al. discloses a dust collecting apparatus comprising a cyclonic chamber (310) having an air inlet (311), an air outlet (313), a dust receptacle (400), a grill body (340) disposed inside the cyclone body (310) a main filter assembly (360) having a dust blocking member (351).

USP 5,757,933 is silent as to a supplementary filter system.

The Kilstrom patent discloses a cyclonic dust collector which includes a supplemental filter assembly (51) downstream from the cyclonic chamber.

Accordingly, it would have been obvious to one skilled in the art to provide the supplemental filter (51) outside the cyclonic chamber of the '628 patent in order to further remove dust particles prior to exhausting the air.

USP 5,757,933 is silent as to a main filter member including folds.

USP 6,436,160 discloses a vacuum having a filter (70) as claimed supported on a frame (82) as claimed.

Accordingly, it would have been obvious to one skilled in the art to use the filter in the '160 patent as the main filter in USP 5,757,933 in view of the use disclosed in the '160 patent.

The US patent references cited above teach all of the elements of claim 25 and 40 with the exception of the screw hole in the upper side of the screw body. USP 6,757,933 shows the grill body (340) held against the upper wall of the cyclone body (310) but does not explain how the grill body (340) is held. However, it would have been obvious to one skilled in the art to include screw holes in the upper side of the grill body (340) since the body (340) is held against the cyclone body in an undisclosed manner.

USP 6,757,933 does not disclose the grill body (340) and main filter assembly (360) are integral.

In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) The court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice." Accordingly, integrating the grill body and filter assembly is an obvious design choice.

Allowable Subject Matter

Claims 1-15,26-35 are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Redding whose telephone number is 571-272-1276. The examiner can normally be reached on Mon.-Fri. 6:00 - 3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran-Piazza can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David A Redding Primary Examiner Art Unit 1744

DAR